

What is claimed is:

1. Arrangement comprising a support body (1) and a substrate holder (2) which is supported thereon and driven in rotation, the gas bearing and the rotary drive being formed by means of gas flowing into the separating gap (7) between support body (1) and substrate (2) from nozzles (11, 12), characterized in that the support body (1) and the substrate holder (2) are formed as rings.
2. Arrangement according to Claim 1 or in particular according thereto, characterized in that the rings rest on top of one another in a self-centering fashion.
3. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that one of the rings (1) includes a ring bead which projects into a ring recess in the other ring (2).
4. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that the substrate is supported on the ring (2) which is driven in rotation only by means of its edge.
5. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that the substrate rests on the ring (2) with minimal contact, preferably only on the tips of needle-like protuberances (13).
6. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that the nozzles (11, 12) open out into grooves, in particular arcuate grooves (10, 12).

7. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that arcuate grooves with gas streams flowing in opposite directions inside them alternate.
8. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized by oppositely directed driving gas streams for rotationally bearing and rotationally driving the rotating ring (1).
9. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that the substrate (3) can be radiation-heated from below through the rings (1, 2).
10. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that the support body (1) and/or the substrate holder consist of quartz or ceramic material.
11. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that the rotationally driven ring (2) has a low heat absorption.
12. Arrangement according to one or more of the preceding claims or in particular according thereto, characterized in that the arrangement is part of a device for the heat treatment of semiconductor wafers.
13. Device for the in particular rapid heat treatment of in particular flat objects, such as semiconductors, glass or metal substrates, having a support body (1) and a substrate holder (2) which is supported thereby in such a manner that it can be driven in rotation and on which the flat object (3) can be placed, it being possible to produce a gas cushion beneath the substrate holder by means of gas which emerges from nozzles which open out into a separating gap (7) between support body (1) and holding body (2), on which

gas cushion the substrate holder (2) rests in such a manner that it is driven in rotation by directed gas streams, characterized in that the support body (1) and the substrate holder (2) are formed as rings and the device is formed in particular according to one or more of the preceding claims.